

LAW OFFICES
LEYDIG, VOIT & MAYER, LTD.
TWO PRUDENTIAL PLAZA, SUITE 4900
CHICAGO, ILLINOIS 60601-6780

RECEIVED
CENTRAL FAX CENTER
JUL 10 2006

TELEPHONE: (312) 616-5600

FAX: (312) 616-5700 (G3)
(312) 849-0495 (G4)

FAX TRANSMITTAL SHEET

DATE: JULY 10, 2006

NUMBER OF PAGES (INCLUDING
THIS FAX TRANSMITTAL SHEET): 16

LVM REFERENCE: 334-1045 CON

FROM: LI-CHUNG D. HO

DIRECT LINE: (312) 616-5600

REGISTRATION No. 41,837

TO: MAIL STOP APPEAL BRIEF - PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
COMMISSIONER FOR PATENTS
ALEXANDRIA, VA 22313

FAX NUMBER: (571) 273-8300

IN RE APPLN. OF: RAYMOND BASS
APPLICATION NO. 10/785,391
FILED: FEBRUARY 24, 2004
FOR: PORTABLE STRIPPING HEAD INDUCTION HEATING SYSTEM FOR STRIPPING
COATING AND LINED METAL OBJECTS AND SURFACES AND METHODS FOR
STRIPPING COATED METAL OBJECTS AND SURFACES

ATTORNEY DOCKET: 334-1045 CON (504031)

ATTACHED PLEASE FIND THE FOLLOWING DOCUMENTS:

1. TRANSMITTAL OF APPEAL BRIEF (2 PAGES W/ DUPLICATE COPY)
2. APPEAL BRIEF (11 PAGES)

A confirmation copy of the transmitted document will:

☒ Not be sent. This will be the only form of delivery of the transmitted document.

The information contained in this fax transmission is intended only for the use of the individual or entity named above and those properly entitled to access to the information and may contain information that is privileged, confidential, and/or exempt from disclosure under applicable law. If the reader of this transmission is not the intended or an authorized recipient, you are hereby notified that any unauthorized distribution, dissemination, or duplication of this transmission is prohibited. If you have received this transmission in error, please immediately notify us by telephone or fax. Thank you.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Patent Application No. 10/785,391

Applicant: RAYMOND BASS

Filed: February 24, 2004

TC/AU: 3742

Examiner: Philip H. Leung

Docket No.: 334-1045 CON (504031)

Customer No.: 23626

RECEIVED
CENTRAL FAX CENTER
JUL 10 2006

TRANSMITTAL OF
APPELLANT'S APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR 41.37, appellant hereby submits Appellant's Brief on Appeal.

The items checked below are appropriate:

1. Status of Appellant

This application is on behalf of ☐ other than a small entity or ☒ a small entity.

2. Fee for Filing Brief on Appeal

Pursuant to 37 CFR 41.20(2), the fee for filing the Brief on Appeal is for: ☐ other than a small entity or ☒ a small entity.

Brief Fee Due \$250.00

3. Oral Hearing

☐ Appellant requests an oral hearing in accordance with 37 CFR 41.47.
A separate paper requesting oral hearing is attached.

4. Extension of Time

☐ Appellant petitions for a one-month extension of time under 37 CFR 1.136, the fee for which is \$ 0.00.
☒ Appellant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that

Application No. 10/785,391

Appeal Brief Transmittal

appellant has inadvertently overlooked the need for a petition and fee for extension of time.

Extension fee due with this request: \$0.00

5. **Total Fee Due**

The total fee due is:

Brief on Appeal Fee	\$250.00
Request for Oral Hearing	\$ 0.00
Extension Fee (if any)	\$ 0.00

Total Fee Due: \$250.00

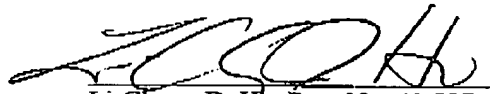
6. **Fee Payment**

- ☐ Attached is a check in the sum of \$
- ☒ Charge Account No. 12-1216 the sum of \$250.00. A duplicate of this transmittal is attached.

7. **Fee Deficiency.**

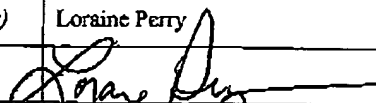
- ☒ If any additional fee is required in connection with this communication, charge Account No. 12-1216. A duplicate copy of this transmittal is attached.

Respectfully submitted,



Li-Chung D. Ho, Reg. No. 41,837
 LEYDIG, VOIT & MAYER, LTD.
 Two Prudential Plaza
 180 North Stetson Ave., Suite 4900
 Chicago, Illinois 60601-6780
 (312) 616-5600 (telephone)
 (312) 616-5700 (facsimile)

Date: July 10, 2006

MAILING/TRANSMISSION CERTIFICATE UNDER 37 CFR 1.8 OR 1.10			
I hereby certify that this document and all accompanying documents are, on the date indicated below, being <input type="checkbox"/> deposited with the U.S. Postal Service using "Express Mail" service in an envelope addressed in the same manner indicated on this document with Express Mail Label Number <input type="checkbox"/> deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed in the same manner indicated on this document, or <input checked="" type="checkbox"/> facsimile transmitted to the U.S. Patent and Trademark Office at fax number: (571) 273-8300.			
Name (Print/Type)	Lorraine Perry		
Signature		Date	July 10, 2006

334-1045 CON (504031)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: RAYMOND BASS)

Serial No.: 10/785,391)

Filed: February 24, 2004)

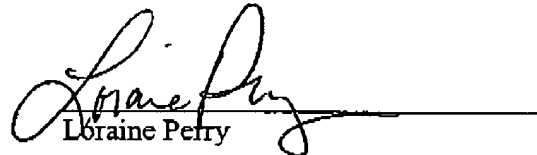
TITLE: PORTABLE STRIPPING HEAD)
INDUCTION HEATING SYSTEM FOR)
STRIPPING COATING AND LINED)
METAL OBJECTS AND SURFACES AND)
METHODS FOR STRIPPING COATED)
METAL OBJECTS AND SURFACES)

Art Unit: 3742

Examiner: Philip H. Leung

RECEIVED
CENTRAL FAX CENTER
JUL 10 2006

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313, on July 10, 2006.


Loraine Perry

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313

ATTENTION: Board of Patent Appeals and Interferences

APPLICANT'S BRIEF

Sir:

This brief is in furtherance of the Notice of Appeal, filed in this case on May 8, 2006.

The fees required under § 1.17(f), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

07/11/2006 HGBREH1 00000032 121216 10785391
01 FC:2402 250.00 DA

I. REAL PARTY IN INTEREST

The real party in interest in this appeal is the party named in the caption of this brief.

II. RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on the Board's decision in this appeal, there are no such appeals or interferences.

III. STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are 1-10.

B. STATUS OF ALL CLAIMS

1. Claims cancelled: 4
2. Claims withdrawn from consideration but not canceled: None
3. Claims pending: 1-3 and 5-10
4. Claims allowed: None
5. Claims rejected: 1-3 and 5-10

C. CLAIMS ON APPEAL

The claims on appeal are 1-3 and 5-10.

IV. STATUS OF AMENDMENTS

There are no amendments filed subsequent to the final rejection.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to an induction heating system for stripping coated and lined metal objects and surfaces and methods for stripping coated metal objects and surfaces.

(Para. 1.) The induction heating system 10 comprises an electrical power supply 12, primary electrical leads 14, a capacitor 16, secondary electrical leads 18, and a stripping head 20,22,24.

(Para. 27.) The primary electrical leads 14 are electrically attached to the electrical power supply 12. (Fig. 1.) The capacitor 16 is spaced from the power supply 12 and is electrically connected to the primary electrical leads 14. (*Id.*) The secondary leads 18 are electrically connected to the capacitor 16. (*Id.*) The stripping head 20,22,24 includes an electrically conductive coil member electrically connected to the secondary leads 18. (Figs. 1-4.)

The length of the secondary leads 18 from the capacitor arrangement 16 to the stripping head 20,22,24 is twenty-five percent (25%) of the length of the primary leads 14 from the capacitor arrangement to the power supply 12. (Para. 31.) The length of the secondary leads 18 is at least twenty (20) feet. (*Id.*) The length of said primary leads 14 is at least eighty (80) feet. (*Id.*)

Figure 1 of the present application is reproduced below:

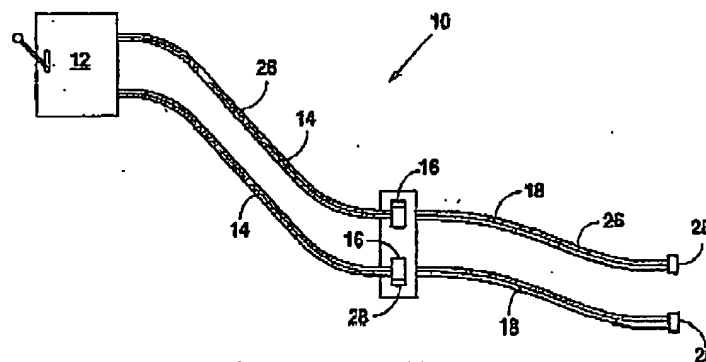


Fig. 1

Figure 1 of the Present Application.

VI. GROUNDS OF REJECTION TO BE REVIEWED

Whether claims 1-3 and 5-10 are unpatentable under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,660,753 to Lingnau ("Lingnau") in view of U.S. Patent No. 5,837,976 to Loveless et al. ("Loveless").

VII. GROUPING OF CLAIMS

A. Claims 1-3 and 5-7 are grouped together for the purpose of this appeal.

B. Claim 8 further recites "the length of said secondary leads from said capacitor arrangement to said stripping head is twenty-five percent (25%) of the length of said primary leads from said capacitor arrangement to said power supply." Therefore, claim 8 do not stand or fall together with claims 1-3 and 5-7.

C. Claim 9 further recites "the length of said secondary leads is at least 20 feet." Therefore, claim 9 do not stand or fall together with claims 1-3 and 5-7.

D. Claim 10 further recites "the length of said primary leads is at least 80 feet." Therefore, claim 10 do not stand or fall together with claims 1-3 and 5-7.

VIII. ARGUMENT

Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being obvious over Lingnau in view of Loveless. Claims 1-3 and 5-10 are allowable for at least the following reasons.

A. Neither Lingnau nor Loveless discloses capacitor(s) spaced from the power supply.

Independent claims 1 and 3 recite in part "capacitor means spaced from said power supply." Independent claim 2 recites in part "first and second capacitors spaced from said power supply." Independent claim 5 recites in part "a capacitor spaced from said power supply."

Lingnau does not explicitly show a capacitor. The Examiner admitted to such on page 2 of the January 10, 2006 Office Action (“[Lingnau] does not explicitly shows [sic] the circuit of the power supply with the use of capacitors (see Figures 1, 2 and 4 and col. 2, line 38 - col. 5, line 45).”).

Loveless does not disclose capacitor(s) spaced from the power supply. Loveless discloses capacitors to form a resonant circuit in the induction heating coil. The capacitors illustrated in Figs. 4a and 4b are, however, associated with the respective power supply. As confirmed in Figs. 5 and 8, the capacitors are within the power supply apparatus 74, 76, 116, 118, 120, 122 and not spaced from it as claimed in the pending claims. Figures 5 and 8 of Loveless are reproduced below:

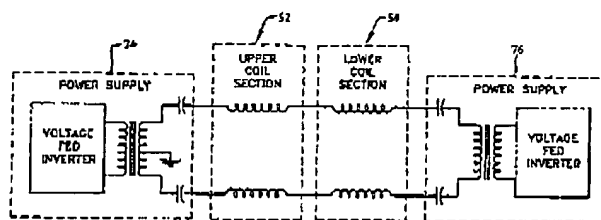


FIG. 5
Figure 5 of Loveless.

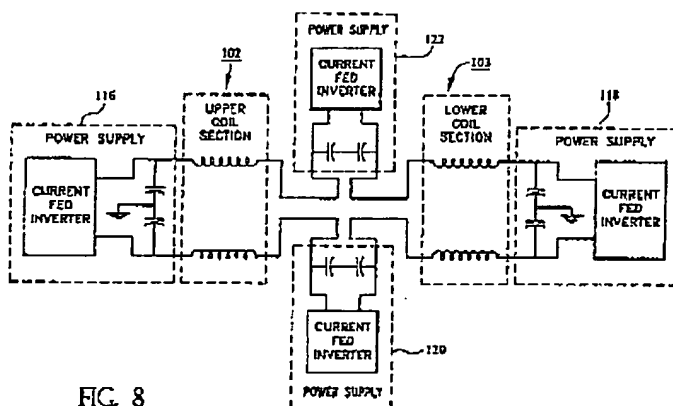


FIG. 8

Figure 8 of Loveless.

Neither Lingnau nor Loveless discloses or suggests capacitor(s) spaced from the power supply. Hence claims 1-3, 5 and their dependent claims are patentable over the cited prior art references.

B. Claim 8 is further distinguished from Lingnau and Loveless.

Claim 8 includes the additional recitation "the length of said secondary leads from said capacitor arrangement to said stripping head is twenty-five percent (25%) of the length of said primary leads from said capacitor arrangement to said power supply."

In making his rejection that claim 8 is unpatentable, the Examiner asserts on page 3 of the Office Action:

"In regard to claims 6-10, the exact power, frequency and the length of the cable would have been a matter of engineering expediency depending on the overall load characteristics and the available cost."

Rejection based on 35 U.S.C. § 103 must rest on a factual basis. In making such a rejection, the Examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 177-178 (CCPA 1968), *cert. den'd*, 389 U.S. 1057 (1968). To draw on hindsight knowledge of the claimed invention, when the prior art references do not contain or suggest that knowledge, is to use the invention as template for its own construction. The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made. *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566 (Fed. Cir. 1996).

Neither Lingnau nor Loveless discloses or suggests the length of the secondary leads from the capacitor arrangement to the stripping head is twenty-five percent (25%) of the length

of the primary leads from the capacitor arrangement to the power supply. Without impermissible hindsight using the teaching of the present application, a person of ordinary skill in the art would not have arrived at the claimed invention. Hence claim 8 is patentable over the cited prior art references.

C. Claim 9 is further distinguished from Lingnau and Loveless.

Claim 9 includes the additional recitation "the length of said secondary leads is at least 20 feet."

Neither Lingnau nor Loveless discloses or suggests the length of the secondary leads is at least 20 feet. Without impermissible hindsight using the teaching of the present application, a person of ordinary skill in the art would not have arrived at the claimed invention. Hence claim 9 is patentable over the cited prior art references.

D. Claim 10 is further distinguished from Lingnau and Loveless.

Claim 10 includes the additional recitation "the length of said primary leads is at least 80 feet."

Neither Lingnau nor Loveless discloses or suggests the length of the primary leads is at least 20 feet." Without impermissible hindsight using the teaching of the present application, a person of ordinary skill in the art would not have arrived at the claimed invention. Hence claim 10 is patentable over the cited prior art references.

IX. APPENDIX OF CLAIMS

1. An induction heating system comprising:
an electrical power supply;
first electrical lead means electrically attached to said electrical power supply, said first electrical lead means for conducting electrical power from said electrical power supply to capacitor means;
capacitor means spaced from said power supply electrically connected to said first electrical lead means;
secondary lead means electrically connected to said capacitor means, said secondary lead means for conducting electrical currents to or from said capacitor means;
stripping head means including an electrically conductive coil member electrically connected to said secondary lead means.
2. An induction heating system comprising:
an electrical power supply;
first and second primary leads electrically connected to said power supply, said first and second primary leads being constructed of elongate, flexible electrical cable;
first and second capacitors spaced from said power supply electrically connected, respectively, to said first and second primary leads;
first and second secondary leads electrically connected, respectively, to said first and second capacitors, said first and second secondary capacitors, said first and second secondary leads being constructed of elongate, flexible electrical cable; and
stripping head means electrically connected to said first and second secondary leads.

3. A method for heating metallic items for loosening coatings or protective layers adhered thereto comprising the steps of:

selecting and induction heating system comprising:

an electrical power supply;

first electrical lead means electrically attached to said electrical power supply, said first electrical lead means for conducting electrical power from said electrical power supply to capacitor means;

capacitor means spaced from said power supply electrically connected to said first electrical lead means;

secondary lead means electrically connected to said capacitor means, said secondary lead means for conducting electrical currents to or from said capacitor means;

stripping head means including an electrically conductive coil member electrically connected to said secondary lead means;

juxtaposing in said stripping head means to a metallic item to which is adhered to-be-removed coating or protective layer;

actuating said the electrical power supply;

maintaining said stripping head means in juxtaposition with said metallic item for a time sufficient to heat said metallic item for a time sufficient to heat said metallic item and loosen said coating or protective layer from said metallic item.

5. An induction heating system for stripping material from a metal surface comprising:

an electrical power supply;

primary electrical leads electrically attached to said electrical power supply and extending therefrom;

a capacitor spaced from said power supply arrangement electrically connected to said primary electrical leads;

secondary electrical leads electrically connected to said capacitor arrangement and extending therefrom; and

a moveable stripping head including an electrically conductive coil member electrically connected to said secondary leads, said leads being of a length to permit use of said head in a location remote from said power supply.

6. An induction heating system as claimed in claim 5 wherein said power supply is 75 KW, 10 KHz frequency and 480 volts.

7. An induction heating system as claimed in claim 6 wherein said capacitor arrangement is 450 KVAR (10,000 cycles per second).

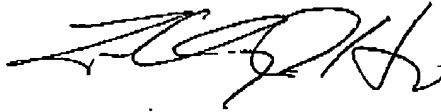
8. An induction heating system as claimed in claim 5 wherein the length of said secondary leads from said capacitor arrangement to said stripping head is twenty-five percent (25%) of the length of said primary leads from said capacitor arrangement to said power supply.

9. An induction heating system as claimed in claim 5 wherein the length of said secondary leads is at least 20 feet.

10. An induction heating system as claimed in claim 9 wherein the length of said primary leads is at least 80 feet.

A reconsideration and allowance of the claims of this application are respectfully requested.

Respectfully submitted,



Li-Chung Daniel Ho
Registration No. 41,837

July 10, 2006
Leydig, Voit & Mayer, Ltd.
Two Prudential Plaza, Suite 4900
Chicago, IL 60601-6780
(312) 616-5646

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.